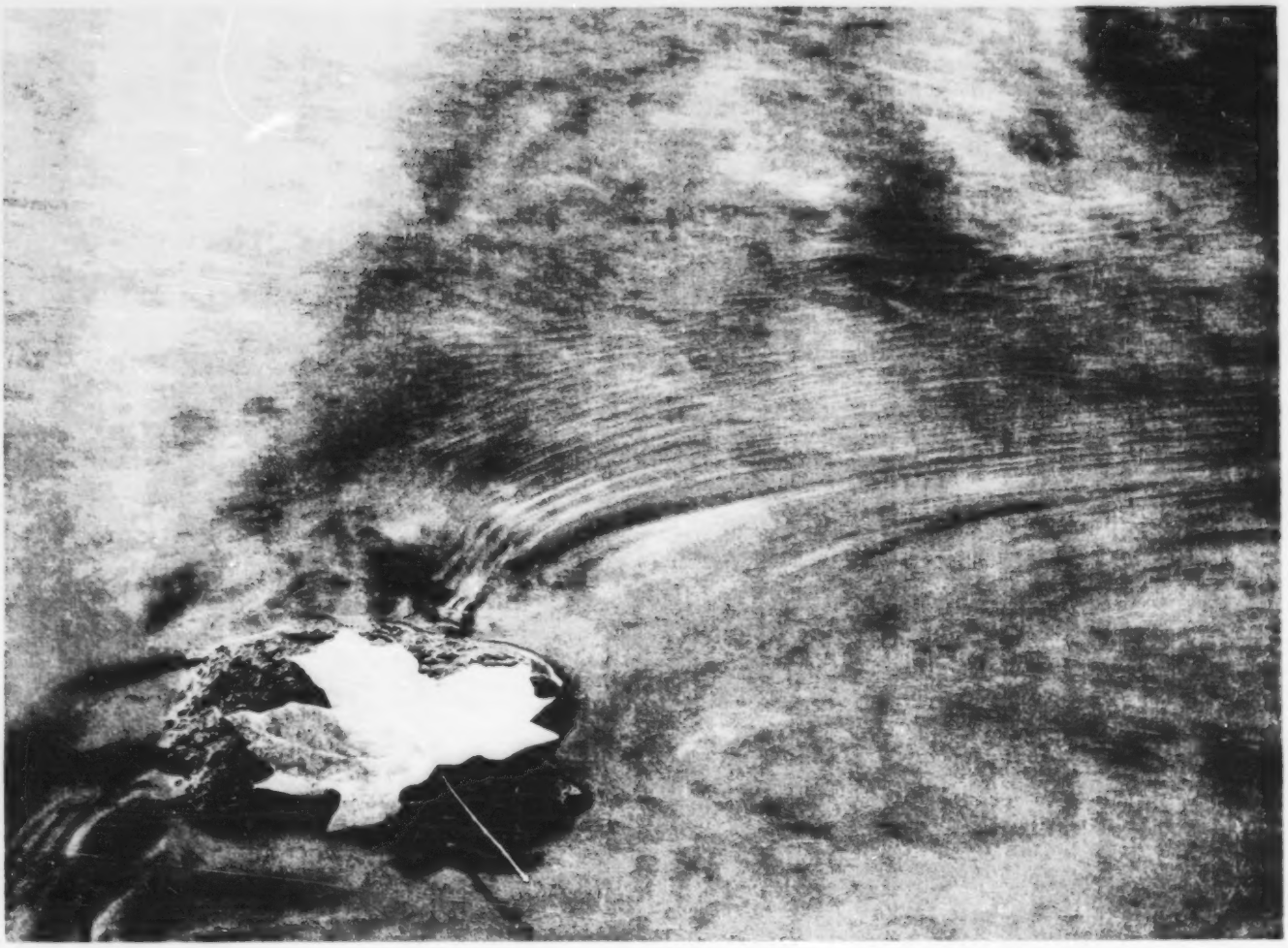
DRINKING WATER PROTECTION PLAN CONSULTATIONS

"What We Heard"

Summary of Input Received



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EXECUTIVE SUMMARY

THE PROCESS

Over the past few months the Government of British Columbia conducted consultations with the general public and a wide variety of stakeholders on drinking water protection in British Columbia. The basis of these consultations was a discussion paper outlining a draft Drinking Water Protection Plan (the Plan). This Plan included proposed approaches in four areas: assessing the water sources and systems, community planning, local authority and influence, and general drinking water measures (including standards, research and public education).

These consultations included information sessions held in 10 locations throughout the province, attended by over 1500 participants including water providers, local governments, health officials, First Nations, environmental groups, resource industries, farmers, ranchers and communities. In addition, information was provided through the mail and on a web-site for broader public access, and written, email and faxed submissions were encouraged. This document outlines the results of these consultations.

COMMON THEMES

In general there was an overwhelming sense that British Columbians want to see strong legislation to protect drinking water. While there were at times diverse opinions about specific suggestions to accomplish this, the general view was that the provincial government should act soon and decisively.

In addition to this general support, there were five major themes frequently repeated throughout the consultations, and in all regions.

THE NEED FOR A LEAD AUTHORITY RESPONSIBLE FOR DRINKING WATER

While the discussion document did not identify a single authority for drinking water the consultations identified this as one of the most important issues. There was strong support for designation of a single lead authority, be it an agency or an independent body, which is responsible for drinking water. There were, however, differing views on who should have this role, often depending on whether participants were concerned about water sources or water systems and treatment.

CONCERN ABOUT INCREASING LOCAL GOVERNMENT AUTHORITY

The proposed Plan identified some initiatives for increasing local government authority and influence in decisions that affect drinking water. This was the portion of the Plan where participants were least comfortable. In some cases this was due to concern on the part of stakeholder groups that local governments would be too easily influenced by local, political or community interests rather than make decisions based on scientific evidence of health hazards. Many local governments welcomed increased influence but were concerned about increased responsibility and the resultant liability. They were also concerned about the potential of the provincial government "off-loading" responsibilities where it would result in increased costs. Those who expressed support for local control appeared to be most supportive of community influence in land use decisions that affect drinking water, especially in the case of areas that were not within municipal boundaries.

CONCERN ABOUT SMALL WATER SYSTEMS

A number of participants throughout all regions of British Columbia expressed concern about what this Plan would do to assist those who operate or rely on small water systems to collect their drinking water. This included local improvement districts and other small communities that do not have the resources to upgrade their systems, or groups of residents in rural areas who shared a water source, or in some cases small domestic users who had a well on their property or used a local stream to collect water. Many asked whether they could have assessments and testing funded to determine the safety of their drinking water, if they could have influence on activities in their watersheds, or if they would be required to meet onerous regulations which would be impractical for small systems.

DESIRE TO INCREASE PROTECTION OF WATERSHEDS

For some the Plan did not go far enough in protecting watersheds and giving water a higher priority in relation to other interests in watersheds. In some cases this view was strong enough to support a moratorium on all activities (including logging, farming, ranching, mining and recreation) in all watersheds that serve as drinking water sources. In other cases the view was more moderate, suggesting that there should be more controls on these activities or increased standards to be met when drinking water was concerned.

FUNDING AND INFRASTRUCTURE COSTS

While there was general support for initiatives for safe drinking water, there was recognition that this would require resources and funding to accomplish. Local governments, purveyors, resource industry representatives, people on small water systems and single family users all expressed the need for the province to assist with the funding of upgrading systems to meet increased regulations, assistance with assessments and planning, and increased resources for monitoring.

OTHERS

As well as the above major themes, a few other common themes were mentioned less frequently but throughout the province. For example, the need for some guidelines or standards for both water source and water systems was commented on frequently, although there was debate as to whether these standards should be site-specific or province-wide. There was strong support for the groundwater (wells) provisions in the Plan; in particular the training and certification of those building and maintaining wells and the introduction of well standards. Many purveyors and others supported the certification of water systems operators. Increased training, research and educational initiatives were strongly supported as well.

GENERAL COMMENTS ON THE PLAN ELEMENTS

ASSESSMENTS

The proposed Plan set out some requirements for assessments of both water sources and water systems in order to collect objective data as a basis for action. Among the participants there was support, albeit cautious, for these assessments. Those who supported the proposals appreciated the value in acquiring objective data, identifying users and possible threats and then using this information to improve decision making. Others expressed concerns and questions regarding the cost of doing assessments (particularly for small systems), who would undertake assessments and be accountable for the results (liability) and how assessments would be tailored to each situation. There

were constructive suggestions on how to improve the proposal by setting clear assessment guidelines, involving multi-disciplinary teams of fully trained practitioners and government staff, and providing resources and funding.

COMMUNITY PLANNING

The proposed Plan identified community planning as a key step in local involvement in decision making. Participants were generally supportive of the need for community planning and in particular supported the emphasis on local involvement and consultation/conflict resolution aspects. However, some concerns were raised about the potential for too many agencies to be involved in planning, a drain on local resources, duplication with other planning processes and the need for clarification of roles and responsibilities. Helpful suggestions were made in all of these areas.

LOCAL INFLUENCE AND AUTHORITY

As noted above, this portion of the Plan was the one participants were least comfortable with. However, it is worth noting that there was support for broad community influence, information and involvement in decisions that affect drinking water.

GENERAL DRINKING WATER MEASURES

The Plan identified three "general measures" components: standards, research and public education. These three components were the ones most strongly supported by the participants.

There was strong support for source and tap water standards, monitoring standards, training and certification standards, although as noted above there was a debate as to whether source and tap water standards should be site-specific or province-wide. There was also strong support for improved research on drinking water issues and increased public notice and education initiatives. Of the concerns mentioned most were related to resource implications on small purveyors and community systems and how the standards would be implemented or enforced. Suggestions were abundant and detailed, providing direction on all of these issues, including the need for training, monitoring, information and education needs, and the types of research required.

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INTRODUCTION

The Government of British Columbia released the Discussion paper Drinking Water Action Plan in January 2001 and began a consultation process that included receiving written submissions and holding consultation and information sessions in 10 communities throughout the province in January and February 2001. The discussion paper provided stakeholders and the general public with an opportunity to comment on a Plan to enhance the safety of drinking water throughout British Columbia.

The regional sessions were attended by over 1500 participants (see Table 1 below), including water providers, local governments, health officials, First Nations, environmental groups, resource industries, farmers, ranchers and communities. The ideas, opinions, suggestions and concerns expressed during these consultations will assist in finalizing a Plan to protect our drinking water and may contribute to new legislation to give this commitment the force of law.

The basis for the consultation and information sessions was a Discussion Paper outlining the Drinking Water Protection Plan (The Plan). The Plan included proposed approaches in four areas: assessing water sources and systems, community planning, local authority and influence, and general drinking water measures (including standards for water sources and water system supported by research and public education). A corresponding comment form was developed to seek input on the Discussion Paper.

This report presents a summary of the input received during the information and consultation process. It begins with a section on methodology and then provides insight into some of the common themes. The bulk of the report provides a summary of the input received across the province for each of the four Plan elements. The final section identifies some of the specific local drinking water issues raised in each of the ten communities where information sessions were held.

THE PROCESS

This report is available on the web at following Drinking Water Site:
www.gov.bc.ca/env/wat/wq/dw

The information and consultation process included daytime and evening sessions in ten communities, broad circulation of the Discussion Paper with the corresponding comment form, and a web-site with the Discussion Paper, detailed backgrounders and opportunities to provide input.

The day-time sessions, attended by approximately 969 participants, provided an opportunity for invited stakeholders to learn more about the Plan through presentations and small group discussions, ask questions and express their own views (See Appendix A for the day-time agenda). Small group sessions focused on the four components of the Plan and were led by Ministry of Environment, Lands and Parks staff with assistance from regional health officials, the Ministry of Health and other Ministries. Participants were asked to comment on what parts of the Plan they supported, where they may have some concerns and changes they might suggest to improve the Plan. At the end of the sessions there was an opportunity for participants to discuss with regional staff any specific or local drinking water issues they had. Participants were encouraged to submit further comments in writing. Over 4,100 individuals and groups – including water providers, local governments, health officials, First Nations, environmental groups, resource industries, farmers, ranchers and communities – were invited to attend these sessions.

The evening sessions, attended by 589 participants, were open to the public and advertised through local newspapers. The sessions began with a welcome by senior regional health and Ministry of Environment, Lands and Parks officials (see Appendix B for the evening agenda). The main part of the presentation was an overview of the Discussion Paper. This was followed by questions on the Plan from the floor, then comments on the Plan, and finally general drinking water comments. The sessions ended with the opportunity for one-on-one discussions between participants and staff from regional health authorities and a variety of Ministries with responsibilities related to drinking water (including Health, Environment, Agriculture, Forestry, Energy and Mines, Municipal Affairs). Participants were again encouraged to complete the Comment Form (see Appendix C). The schedule of sessions and attendance is indicated in Table 1 below.

The locations of the sessions were chosen to achieve regional diversity across the province and to correspond with the locations studied in the Auditor General's 1998/1999 report, Protecting Drinking Water Sources. The locations with the highest participation rates were Kelowna, Nanaimo, Vancouver and Cranbrook.

Table 1: Information Session Schedule and Participation Rates

Community		Morning	Afternoon	Evening	Totals
Nanaimo	January 26, 2001	78	49	120	247
Abbotsford	January 29, 2001	43	37	65	145
Kelowna	January 31, 2001	84	106	102	292
Cranbrook	February 2, 2001	89	60	27	176
Smithers	February 5, 2001	n/a	54	51	105
Prince George	February 6, 2001	n/a	70	28	98
Fort St. John	February 7, 2001	n/a	48	13	61
Williams Lake	February 8, 2001	n/a	62	37	99
Vancouver	February 13, 2001	53	43	105	201
Kamloops	February 15, 2001	n/a	93	41	134
TOTALS		**347**	**622**	**589**	**1,558**

The consulting firm Praxis Pacific was hired to assist with the design, facilitation and implementation of the information sessions and to prepare this independent analysis and summary of input received during the process. The Praxis team would like to extend its warmest appreciation for the thoughtful and helpful comments contributed by all participants.

METHODOLOGY

The data for this report is drawn from a wide variety of sources. Table 2 indicates these sources and the number of records for each source.

Table 2: Data Sources and Number of Records

Source	No. of Records
Written Comment Forms (handed in at sessions, by fax or mail)	222
Written Submissions (by fax, mail or e-mail)	184
Recorders' notes from small group discussions/daytime sessions	108
Facilitator reports of small group discussion/daytime sessions	27
Recorders' notes/evening sessions	10

An Excel database was created to manage all of the electronic data, including comment forms, written submissions, recorders' notes and facilitator reports. All of this information is sorted into the four topic areas outlined in the discussion paper: assessment, community planning, local authority and influence and general drinking water measures. Within these topic areas, the data were sorted into the following categories: reasons for support (i.e. things people liked about the Plan), concerns about the Plan, and suggestions to improve the Plan. Written submissions that were not sent in electronic form were marked throughout the text to identify discussion related to each of the topics (to aid in the analysis), but were not entered into the electronic database.

To create summaries for each of the topic areas, the data were further sorted into common themes or viewpoints. These are captured in the summary and presented roughly in order of priority based on the frequency with which the themes emerged. This is a qualitative analysis of information provided in a wide variety of formats and therefore does not lend itself well to quantitative or statistical representation.

The text shown in *Italics* within the four topic areas are direct quotes from written input and paraphrases from notes of verbal input. These were carefully selected to represent the common viewpoints on the topic, provide a flavour of opinions from around the province and to capture some of the detail often lost in summaries. Following each quote (and shown in round brackets) is the location of the information session where the viewpoint was expressed or the home community of those providing comments in writing. Contextual information or editorial corrections [in square brackets] are added within some of the quotes to add clarity.

THEMES

There were a number of themes across regions and topics related to drinking water. The first was an overwhelming sense that British Columbians want to see strong legislation to protect drinking water. While there were at times diverse opinions about specific suggestions for how to accomplish this, or numerous helpful suggestions about how to improve the proposed Plan, the general view was that the provincial government should act soon and decisively.

- *I feel your Drinking Water Protection Plan is an excellent initiative and I hope that my comments and experiences will be helpful. (Wasa Lake)*

In addition to this general support, there were five major themes that were frequently repeated throughout the consultations, and in all regions. Below these cross-cutting themes is a summary of what we heard about each of the four main elements of the Plan.

THE NEED FOR A LEAD AUTHORITY RESPONSIBLE FOR DRINKING WATER

While the discussion document did not identify a single authority for drinking water the consultations identified this as one of the most important issues for British Columbians who commented. There was strong support for designation of a single lead authority, be it an agency or an independent body, who is responsible for drinking water. There were, however, differing views on who should have this role, often depending on whether participants were concerned about water sources or water systems and treatment.

- *Under this legislation responsibility should be given to a single agency ("the water agency") for assuring an ongoing supply of safe drinking water to all citizens. (Smithers)*

CONCERN ABOUT INCREASING LOCAL GOVERNMENT AUTHORITY

The proposed Plan identified some initiatives for increasing local government authority and influence in decisions that affect drinking water. This was the portion of the Plan where participants were least comfortable. In some cases this was due to concern on the part of stakeholder groups that local governments would be too easily influenced by political or community pressure rather than make decisions based on scientific evidence of health hazards. Many local governments welcomed increased influence but were concerned about increased authority and the resultant liability of local governments. They were also concerned about the provincial government "off-loading" responsibilities where it would result in increased costs. Those who expressed support for local control appeared to be most supportive of community influence in land use decisions that affect drinking water, especially in the case of areas that were not within municipal boundaries.

- *I would be nervous about giving too much control to local communities to control land use to protect watersheds and/or groundwater recharge areas. (Blind Bay)*

CONCERN ABOUT SMALL WATER SYSTEMS

A number of participants throughout all regions of British Columbia expressed concern about what this Plan would do to assist those who use small water systems to collect their drinking water. This included local improvement districts and other small communities that do not have the resources to upgrade their systems, or groups of residents in rural areas who shared a water source, or in some cases small domestic users who had a well on their property or used a local stream to collect water. Many questioned whether they could have assessments and testing funded to determine the safety of their drinking water, if they could have influence on activities in their watersheds, or if they would be required to meet onerous regulations which would be impractical for small systems.

- *There has to be recognition of small private operators that cannot possibly pass on the costs to their users. (Telegraph Cove)*

DESIRE TO INCREASE PROTECTION OF WATERSHEDS

For some the Plan did not go far enough in protecting watersheds and giving water a higher priority in relation to other interests in watersheds. In some cases this view was strong enough to support a moratorium on all activities in all watersheds (including logging, farming, ranching, mining and recreation). In other cases the view was more modified, suggesting that there should be more controls on these activities or increased standards to be met when drinking water was concerned.

- *[We] reject the concept of multiple use of watersheds. We urge you to ban logging in watersheds and to legislate "Watershed Reserves", to protect the source of water by ensuring that these areas that have no logging, road-building, mining, grazing or other potentially contaminating activities. (Nanaimo)*

FUNDING AND INFRASTRUCTURE COSTS

While there was general support for initiatives for safe drinking water, there was recognition that this would require resources and funding to accomplish. Local governments, purveyors, resource industry representatives, people with small water systems and community and domestic users all expressed the need for the province to assist with the funding of upgrading systems to meet increased regulations, assistance with assessments and planning, and increased resources for monitoring.

- *Should the government provincially set standards they MUST be willing and able to help those communities, like Telkwa, which do not have the dollar resources to meet standards in water treatment or delivery. (Telkwa)*

OTHERS

As well as the above major themes, a few other common themes were mentioned less frequently but throughout the province. For example, the need for some guidelines or standards for both water source and water systems was commented on frequently, although there was debate as to whether some of these standards should be site-specific or province-wide. There was strong support for the groundwater (wells) provisions in the Plan; in particular the training and certification of those building and maintaining wells and the introduction of well standards. Many purveyors and others supported the certification of water systems operators. And increased training, research and educational initiatives were strongly supported as well.

PROCESS COMMENTS

Participants appreciated the opportunity to learn about the Plan through plenary presentations and the small group discussions. In the evening sessions, they also found the one-on-one discussions with knowledgeable staff to be very useful. Participants were pleased to see and hear from a broad range of people with various interests at the sessions.

Some participants voiced concerns about how quickly the process was moving and how difficult it was to review and comment on the Plan in the time provided. Other concerns were about information session locations (e.g. there was no session in the West Kootenays where drinking water concerns are high), and about groups that were not directly consulted in the stakeholder sessions prior to the information sessions.

1A. ASSESSING WATER SOURCES

It appears that respondents support the need for water source assessment, although support was more strongly indicated by participants at information sessions than by respondents who commented in writing (i.e. used the comment form or made a written submission). Among respondents using the comment forms, there was a fairly even three-way split among those who indicated support, a neutral view on support, or lack of support in relation to assessing water sources.

PROPOSAL SUPPORT – ELEMENTS SUPPORTED AND REASONS FOR SUPPORT

Of those who indicated support or partial support for the proposals, the main reasons given or elements supported are provided below with sample quotes shown in *Italics*.

ACQUISITION OF OBJECTIVE DATA

Collecting objective, technical information about water sources for wide spread use was largely supported.

- *Increased knowledge of water systems and water sources is necessary. All interests are served when this information is public and shared among relevant agencies. (Fruitvale)*

ENHANCING DECISION-MAKING – DECISIONS BASED ON AN INCREASED KNOWLEDGE

Using the data obtained from sources assessments to fortify planning and decision making within water sources was a common area of support.

- *Actions based on an assessment rather than "guessing". (Abbotsford)*

IDENTIFICATION OF POSSIBLE THREATS

Assessing and identifying potential threats or risks to the water source was a common area of support.

- *I support a government funded and conducted study of all well or watershed capture zones and lands that pose a risk to the water quality now and over the foreseeable future. (Burnaby)*

ADDITIONAL INFORMATION – ABOUT ALL ASPECTS OF THE WATERSHED

A holistic approach to water source assessment, including land uses, biophysical characteristics and socio-economic impacts was supported.

- *Important to look at whole watershed, all existing land uses etc. (Parksville)*

IDENTIFICATION OF ALTERNATE SOURCES OF WATER

Some respondents indicated support for the identification of alternative sources of surface and ground water in the event of contamination or severe weather impacts.

- *I think the water source assessment is a good process and at this point in our knowledge should be the priority, particularly relating to alternative sources in case of accidental contamination or due to severe weather impacts. (Vancouver)*

CONCERNS ABOUT THE PROPOSALS

The most frequently mentioned concerns about assessing water sources included roles, responsibilities and accountabilities, funding and the need to ensure protection. There were a number of other considerations mentioned, including the following.

COSTS – PAYING FOR ASSESSMENTS, PARTICULARLY FOR SMALL SYSTEMS

Concerns about the financial burden of water source assessments, particularly for smaller communities and purveyors, was common.

- *Small water system operators have enough difficulty operating and maintaining their water systems and managing to stick to a routine water-sampling program. These additional responsibilities may be beyond their scope and the resources to pay a consultant to carry out these assessments only adds to the expense of running a water system. (Lantzville)*

ROLES AND RESPONSIBILITIES – ACCOUNTABILITIES FOR THE ASSESSMENTS

Participants were uncertain about who would be ultimately responsible for ensuring a proper assessment of the water source.

- *Monitoring, review and education all excellent for assuring awareness but I'm unsure as to the accountability – i.e. who is accountable at the end of the day? (Abbotsford)*

LIABILITY – WHO IS LIABLE IF ASSESSMENTS REVEAL PROBLEMS

Where the liability falls if the assessments reveal problems was a concern, particularly for small purveyors.

- *Ensure that purveyor's responsibilities are clear in the legislation and the purveyor is an equally responsible partner. The purveyor has made a decision to purvey and should be accountable. (Cumberland)*

STANDARDS – NEEDED AS BASIS FOR ASSESSMENT

Assessments should be conducted based on water quality standards as comparison.

- *Assessments against industry and public health standards are a good thing but "assessments" are not the starting point. The starting point is setting standards for drinking water quality and treatment, which minimize public health risks. Once this is done sources and systems can be properly assessed against the agreed upon standards. (North Vancouver)*

PROTECTION – THE NEED TO FOCUS ON PROTECTING THE WATER SOURCE

Concerns that water source assessments will not be enough to protect the water sources were commonly heard.

- *Cut the red tape – commit and do it. The trees will be cut down and watersheds irreparably damaged while we are waiting ... (Qualicum Beach)*

RISK ASSESSMENTS – NEED FOR RISK ASSESSMENT METHODOLOGY

Concerns were made that simply making inventory assessments of water sources will not be sufficient for protecting and managing sources; risk assessments should also be conducted.

- *Inventory will be insufficient to make decisions. Risk assessments and data collections are essential to protection. (Victoria)*

LEVELS OF ASSESSMENT – NEED FOR DIFFERENT LEVELS

Source assessment requirements should be site specific, based on system size and supply was another concern.

- *Assessments need to recognize the varied conditions within the province. Water supply issues in Chetwyn, Creston and Comox may be completely different. Consistency is important for comparison of similar systems between jurisdictions. (Lantzville)*

PRIORITY – UNDERTAKE ASSESSMENTS ONLY AS NEEDED

Some respondents indicated a concern for the need of assessing all water sources and suggested that assessments should only be done if needed.

- *We've made this way too complicated. Our first duty is to get an overview of water in all of BC. The simple way to do this is to sample residential wells, streams, lakes and look for things like nitrate. If we find them then we can do more detailed studies. We need general information first and some history to make good land use decisions. (Cariboo)*

NEED TO TAKE ACTION NOW – NOT MORE ASSESSMENT

There was concern that conducting source assessments would waste time and money that could better be used to fix immediate problems and protect the water sources.

- *We've done the studies and have had a Plan for a long time – the only thing we need is the funding for infrastructure to fix our problems (Telkwa)*

QUALIFICATIONS – NEED FOR QUALIFIED PERSONNEL

The lack of, and need for, qualified personnel to conduct or assist with the assessments was another concern.

- *Where are the qualified people to do this work – there just aren't enough of them? (Kamloops)*

OBJECTIVITY – CONCERNS ABOUT SUBVERSION AND BIAS

Concerns were made about the ability to have objective, unbiased assessments without interference or hindrance from corporate interests.

- *The much-ballyhooed "assessment" process, in my opinion, leaves much to be desired, and is obviously vulnerable to subversion by powerful corporate interests and less government bodies in their thrall." (Nanaimo)*

- *I'm worried about who will be doing these assessments -- every ministry involved in water protection is beholden to the Ministry of logging. (Victoria)*

OTHER CONCERNS

Other concerns included the ability of water source assessments to indicate impacts from various resource activities; that assessments would not consider the ecology of the resource; and the need to collect new data on water sources instead of compiling existing data.

SUGGESTIONS

There were many suggestions for changes or refinements to the water source assessment proposals. Suggestions were made concerning methodology, personnel, roles and responsibilities, funding, resources and data, appeal process, liability, and community involvement and public education. These suggestions are described below.

ASSESSMENT METHODOLOGY

There were suggestions for clear and consistent guidelines to be used for all assessments. However, there were also suggestions that guidelines should be site-specific, depending on the size and nature of the community, industrial uses, etc. Some suggested a basic model (for small systems) to be enhanced as required. Other comments were that assessment needs to be science-based, that risk assessment needs to be addressed in the methodology (e.g. a risk acceptability framework) and that a process that allows exemptions for fully compliant jurisdictions is needed. Some thought that it is important to clarify the triggers to an assessment as well as the approach and timeframe

for responding to an assessment. Other suggestions were that initial assessments be followed up with regular monitoring and that assessments of water quantity are carried out as well.

- *Need to define triggers for assessment. (Cranbrook)*

- *Need strong guideline/standards for water source assessments. (Nanaimo)*

- *Provide a set number of parameters that must be tested for in all source waters (e.g. microbiological, Nitrates, turbidity, pH, hardness, alkalinity, Mn_2+, Ca_2+, Mg_2+, Cl (Prince George)*

- *Efforts should also be devoted toward activities which do not take place on land yet have impacts on water quality. Water-based activities on the Shuswap Lake system are a good example. (Kamloops)*

- *We suggest that an assessment of the water system also include an assessment of the following key elements: cross connection control; water conservation; system finance and administration. (Coquitlam)*

ASSESSMENT PERSONNEL

There were suggestions about using a multi-disciplinary assessment team, ensuring that professionals are involved and providing training to those involved in assessments. Some respondents thought that government officials should be involved and others suggested standards for training and certification.

- *In addition to certification for well drillers and pump installers we would encourage regulation regarding suitable qualification or certification for those performing water source assessments. (Coquitlam)*

- *Assessments should be done by "aquifer committees" which should include members from Health, Environment, Agriculture, Forestry as well as purveyors, etc. (Chilliwack)*

ROLES AND RESPONSIBILITIES/JURISDICTIONS

There was a range of suggestions about responsibilities for leading and directing the process (e.g. enabling legislation, assessment structures). Respondents believed it important to clearly identify who will perform these roles. Another suggestion was to address assessment in local planning processes (e.g. OCP's, LRMP's) to ensure that drinking water is considered during future development.

- *I still think that a single person (Drinking Water Operator) needs to be appointed who controls the priority of assessments and ensures the recommendations are incorporated in some planning process [that] results in a positive difference in water quality from the source. (Williams Lake)*

FUNDING

Some thought that it is important to identify how assessments will be funded – many assumed it would be the government. There was also a suggestion to phase in the standards to spread costs out over time.

- *Funds and expertise must be available if proper assessments are to be done. (Hudson's Hope)*

- *To address the issue of cost to comply with standards, one option is to give communities a reasonable time to comply with the standards in order to spread out the costs. (Coquitlam)*

SHARING AND POOLING RESOURCES AND DATA

Many believed it important to build on work already undertaken (e.g. by non-government organizations, local authorities, purveyors, others) and pool resources.

- *Government should assist in the formation of cooperatives covering each water source, to ensure appropriate cost effective testing, monitoring and communication of test results for all users. (Prince George)*

APPEAL PROCESS

There was a suggestion that a process be identified in the event that there is dissatisfaction with the assessment.

- *Need arbitration/appeal mechanism for assessment if a community feels it isn't sufficient. (Kelowna)*

LIABILITY

Purveyors want government to address their liability concerns in the event that an assessment identifies a risk beyond their influence.

- *What if a purveyor does an assessment and there are problems upstream that they have absolutely no control over – who is responsible then? (Armstrong)*

COMMUNITY INVOLVEMENT

A number of respondents believed it important to involve communities in setting standards for assessments and that data should be made available to the public.

- *Need to find ways to involve community/standards at [the] front end of [the] assessment. (Vancouver)*

1B. ASSESSING WATER SYSTEMS

It appears that respondents support the need for water system assessment. Of those who indicated their level of support, slightly more respondents indicated some comfort than discomfort. Elements of the proposal that received the most support included getting better data, identifying potential problems, examining the training and certification of operators, and standards. Concerns included costs, confusion about roles and responsibilities, the need to protect, treatment approaches, and expertise of assessors. Suggestions addressed resourcing, assessment criteria, standards, roles and responsibilities, legislation, training, information sharing, different size systems, and treatment.

PROPOSAL SUPPORT – ELEMENTS SUPPORTED AND REASONS FOR SUPPORT

Of those who indicated support for the proposals many of the reasons for support were the same as those identified for water sources i.e. acquiring objective data, enhancing decision-making and identifying threats. Support for assessments specific to systems included:

TRAINING AND CERTIFICATION FOR OPERATORS – CONFIRMED THROUGH ASSESSMENT

Verification of proper training and certification of operators through system assessments was supported, as was funding for training courses.

- *Mandatory training for water operators – help fund "free" courses. (William's Lake)*

STANDARDS FOR SYSTEMS – USED AS BASIS FOR ASSESSMENT

The implementation of standards for water system assessments was commonly supported.

- *BC must adopt the Canadian Water Guidelines and strictly enforce them through this assessment process. (Fernie)*

GETTING BETTER DATA

Participants thought that system assessments would greatly improve the knowledge and data available to operators and decision-makers.

- *Another dilemma is the lack of knowledge of the physical layout of the water lines, the Village is no longer able to provide the quantity of water required, and we are on water restrictions year round. Apparently no one kept track of installations, additions, etc... We can't adequately update a system if we don't know where the existing lines are. (Fruitvale)*

CONCERNS ABOUT THE PROPOSALS

Many of the concerns about assessing water systems were similar to those identified for water sources. Concerns specific to water systems included:

COSTS – PAYING FOR ASSESSMENTS OR INFRASTRUCTURE

Funding and the lack of financial resources are concerns for conducting water system assessments. Also of concern is that resources used for the assessment could be better used for infrastructure repair/growth.

- *Concern that assessments might delay opportunities for infrastructure growth and funding. Some purveyors already have sufficient information [and] want support for action now, not after a drawn-out assessment/planning process. (Smithers)*

ROLES AND RESPONSIBILITIES – ACCOUNTABILITIES FOR ASSESSMENTS

Concerns over who would be involved in the assessment and who would be ultimately responsible were expressed.

- *Who will have input to this? Who will coordinate the assessment? (Nanaimo)*

- *Who would be accountable to (1) ensure the recommendations are incorporated in plans, [and] (2) determine if the recommendation was a success? (Williams Lake)*

TREATMENT – PARTICULARLY THE USE OF CHLORINE

Concerns were made that not enough attention was being directed towards protecting water sources rather than relying on water treatment. Opposition to chlorination was the main concern.

- *I was hoping that more time could be spent on discussing alternatives to chlorine. It is an out-dated mode of disinfection and a known ozone depleter. (Erickson)*

- *I don't like the idea that we can abuse the watersheds and focus on new technology to purify the water downstream. (Victoria)*

STANDARDS NEEDED AS BASIS FOR SYSTEM ASSESSMENT

See comments on standards in Section 4b.

SUGGESTIONS

There were many suggestions for changes or refinements to the water system assessment proposals. The most frequent suggestions related to resources, criteria, standards, roles and responsibilities, communication and treatment. These suggestions are highlighted below.

RESOURCING

Suggestions included providing both financial resources and expertise to help with the assessment of small and private systems and to help remedy problems; allowing small jurisdictions to access infrastructure funding; and using full-cost pricing to generate funds.

- *Expert resources need to be made available to the small communities to ensure that their assessment process is productive and useful. (Not to do the assessment for the community but to help if needed). (Vancouver)*

- *Funding for all aspects of the Plan through the implementation along with such issues as purveyor ability to recover costs from customers need to be considered in the Assessment. (Burnaby)*

- *Improved cost-sharing/funding for small systems/improvement districts. (Cranbrook)*

CRITERIA

Some participants thought that all systems should be assessed with different requirements for different size systems

- *There needs to be a better definition of what each level of requirement is for the different size systems. Also some larger systems service areas where the residences can not afford studies. (Parksville)*

- *Delete the requirements for a minimum of 15 connections on a community system before an assessment can be done. This condition does not reflect the reality of life in many unincorporated areas. It does not capture watersheds for lakes or for rural/ agricultural areas where there may be significant numbers of individual intakes or wells over a relatively wide geographic area. (Port Alberni)*

STANDARDS FOR ASSESSING SYSTEMS

It was suggested that standards should be established to compare systems against during the assessments. Related suggestions included using recommendations from the assessments to update or develop new standards, and adopting the Canadian Drinking Water Guidelines as standards.

- *More province-wide tap water standards for pollutants–health-related, with flexible monitoring requirements–site-specific. (Cranbrook)*

- *Follow Canadian drinking water standard and implement mandatory operator certification and discontinue sewage septic field in subdivisions. (Summerland)*

ROLES AND RESPONSIBILITIES

Suggestions as to who should be involved and who should conduct the system assessments included ensuring the involvement of professionals; using trained individuals to conduct the assessments; using independent or outside assessors; and using Ministry of Health officials to conduct the assessments.

- *An effective means of completing the assessments would be through a formal Peer Advisory … follow a standard provincial format. The AWWA has developed a system for peer review; this may provide a template for a BC model. (Lantzville)*

- *Folks who impact on sources and purveyors may not be as critical of their practices or treatment/distribution systems as an outside source. (North Cowichan)*

- *Ministry of Health and Regional Health officials already have good data and knowledge of systems – they should carry out the assessments. (Vernon)*

PUBLIC AWARENESS AND INVOLVEMENT

It was suggested that results and information from system assessments should be made available to the public, and should be accompanied by educational material to increase public awareness about their water systems. It was also suggested that the public could assist in the assessments through identification of risks.

- *Increased knowledge of water systems and water sources is necessary. All interests are served when this information is public and shared among relevant agencies. (Lantzville)*

- *Provide a means to anonymously register concerns with respect to possible water contamination problems (e.g. a neighbour's old well head is broken off … creating a nice duck pond). (Prince George)*

TREATMENT – MAKE MANDATORY FOR SURFACE WATER, DON'T OVER TREAT, AVOID CHLORINE

Suggestions regarding treatment included making treatment mandatory for all surface water sources; increasing training of treatment operators to avoid over treating; and finding and offering alternative treatment measures to chlorination.

- *I would propose that information on alternative disinfection techniques be made available in advance to those doing the system assessment so that they are looking at the viability of the disinfection techniques at the same time. (Vancouver)*

- *There's got to be a better cleaner/filter system than using chlorine. (Vancouver)*

- *Focus must be on source protection with minimal necessary treatment. Study should also include human resistance to pathogens – 1/2 population of the world lives with Giardia. (Victoria).*

2. COMMUNITY PLANNING

Respondents are supportive of the need for local or community planning. Over two thirds of those who used the comment sheet indicated either a neutral position, some comfort or high comfort with the proposals. The most frequently mentioned concerns were about the number of agencies involved, the potential drain on local resources, Cabinet approval, another planning process, availability of local expertise and clarification of roles and responsibilities. Suggestions focused on these concerns. Dominating the suggestions were having one authority/department to oversee water, using an existing planning process, clarifying roles and responsibilities, having a guiding legislative framework, and halting development while the planning is underway.

PROPOSAL SUPPORT – ELEMENTS SUPPORTED AND REASONS FOR SUPPORT

Of those respondents who supported community planning, the main reasons focused on local involvement. Opinions were mixed about whether water should be a priority over other interests or part of a number of considerations. These viewpoints are presented below.

RECOGNITION OF REGIONAL AND LOCAL GOVERNMENTS AS LAND USE AUTHORITIES

Local and regional authority of land use and water sources was supported.

- *Recognition of regional and local governments as local land use authorities is good! (Spallumcheen)*

INVOLVEMENT OF LOCAL PUBLIC

Community input and involvement in the planning processes was another supported aspect of the proposal.

- *Community based planning best way to address community water resources. (Abbotsford)*

EMPHASIS ON CONSULTATION AND CONFLICT RESOLUTION

Involving multi-stakeholder consultation and conflict resolution practices in the land use planning processes was supported.

- *I am supportive of a consultative approach, let's work together with all of the owners and people involved, rather than heavy legislative approach. Bring people together to talk. (Ft. Langley)*

- *I particularly like the idea that the planning process has a definite time frame and a conflict resolution process. (Nanaimo)*

ABILITY TO GIVE WATER PRIORITY IN PLANNING

Having a framework for planning that focuses on water and the potential for water to have the highest priority in land use and community planning was another area of support.

- *I think this is a great idea. The communities need input so the environment and water resources can be protected. (South Surrey)*

- *Support that drinking water is a priority over other community interests. (North Vancouver)*

CONCERNS ABOUT THE PROPOSALS

There were several concerns regarding the proposals. The most frequently mentioned concerns were resources and expertise of local jurisdictions, system size, priority of water, agency and Cabinet involvement, existing processes, clarity and over-planning. These concerns are described below.

LOCAL JURISDICTIONS MAY LACK THE EXPERTISE AND RESOURCES

Some participants thought that local jurisdictions are not ready to take on the authority over land use and drinking water protection and suggested that more expertise, training and resources are required.

- *The local areas should have influence on the activities of their area–but they don't have the resources to identify incoming problems. (Enderby)*

- *I am unsure about the ability of communities (local government) to carry out their responsibilities due to lack of financial resources, staff, and will. (Telkwa)*

SHOULD WATER DOMINATE A PLANNING AGENDA?

There was some debate whether water should be given the highest priority in community planning. Some respondents felt water should be considered above all else while others urged the consideration of all aspects within a water source.

- *Community planning for water quality issues will be better served with a process whereby multiple use objectives must be considered. Water quality policy must be considered in the context of the land use it will impact. Policies should consider the tradeoffs that might occur. (Lantzville)*

- *While it may be admirable to ban industrial operations within certain watersheds to protect our water quality, we cannot totally exclude the needs of the communities who rely on these industrial operations for their very existence. One cannot be totally exclusive of the other. (Chase)*

TOO MANY AGENCIES WILL BE INVOLVED

Concerns were raised that there will by too many agencies and groups involved in the planning processes for them to be effective.

- *Again – good in theory but the number of groups involved is huge–MOH, MELP, Ministries of Labour, Aboriginal Affairs, Forestry, municipal governments etc.–The task of doing the job day-to-day (inspection and monitoring) is huge add to it the communication efforts? All these would require a huge amount of resources. Are these tabulated in? (Abbotsford)*

CABINET SHOULD NOT BE INVOLVED

The requirement for Cabinet approval instead of Ministries with experienced personnel was a concern among respondents.

- *Why go to cabinet for the approval of plans. Why not to MOH/MELP where the experts reside. (North Cowichan)*

A NEW PROCESS IS NOT NEEDED – USE EXISTING PROCESSES

Many expressed their view that existing planning processes are already in place in many municipalities or regions and that these existing processes should be used instead of implementing yet another one.

- *Elements to participate effectively in land-use planning (e.g. LRMPs) are already available. (Smithers)*

ROLES AND DEFINITIONS ARE UNCLEAR

Some were unclear as to what the community planning process will consist of and what roles those involved will play.

- *Not clear on the process. Who sets the terms of reference? Who determines who is a legitimate stakeholder? Who chairs these committees? (Cranbrook)*

THIS WILL CONTRIBUTE TO PLANNING FATIGUE

Some said that community planning is time consuming and can wear out those community members involved.

OTHER CONCERNS

Other concerns raised were that the process should be routine not optional, specific details about the process are missing, community input is lacking in the implementation, equal and even representation is lacking, risk of process being hijacked by special interest groups, and potential for inconsistencies across the province. There was also concern that this framework may not apply to private lands (similar to the Forest Practices Code).

SUGGESTIONS

The most frequently mentioned suggestions were having a lead authority, using existing planning processes, roles for leadership and authority, local control, planning legislation, and ensuring planning in place prior to development. These suggestions are highlighted below.

HAVE ONE AUTHORITY

Some suggested having one authority to oversee water and/or water planning e.g. a Ministry of Water, or one individual.

- *Local expertise should be heard, but there must be ultimately a single over-riding authority which administers, regulates and ensures that everyone plays by a defined and understood set of rules. (Salmon Arm)*

- *Community involvement yes, but one agency to be in charge so we know where to go. (Qualicum Beach)*

USE AN EXISTING PLANNING PROCESS

Suggestions were given to use existing processes such as the Liquid Waste Management Process (LWMP), Official Community Plan (OCP) processes or regional growth strategy processes.

- *Citizens are inundated with existing local, regional and provincial planning processes. I encourage you to consider utilizing existing processes. For instance why not include the drinking water planning process as a component of Regional Growth Management Plans or Official Community Plans. (Lantzville)*

CLARIFY ROLES, PARTICULARLY FOR LEADERSHIP/AUTHORITY

Suggestions included a local officer to work with a multi-stakeholder committee, a local expert to advise planners. Conversely there were suggestions that there not be one lead authority but rather that all present be equals.

- *The use of a local "expert" who can present the alternative and consequences to the community planners to evaluate may assist. (Vancouver)*

- *Consultation between all levels of government i.e. Mining, First Nations, Forestry, Agriculture and Municipal Affairs as equals in developing a plan–avoid trump card and intergovernmental conflicts. (Qualicum)*

LOCAL CONTROL

Whether or not to have local control was a subject of debate. Suggestions for moving from local control included accountability to an expert or regional district.

- *Make local government accountable to the regional district. (Port Hardy)*

- *You also need non-government organizations i.e. BC Lake Stewardship Society and its members who have considerable local knowledge etc. (Osoyoos)*

PLAN WITHIN A LEGISLATED FRAMEWORK

Some suggested this legislation be provincial, while others indicated national. The United States model was also suggested.

- *I think community planning is good but only within a legislated provincial framework. (Kelowna)*

PUT DEVELOPMENT ON HOLD WHILE PLANNING

Suggestions were made to address drinking water issues prior to land development and the issuance of building permits.

- *Before planning process to begin, all conflicts must be put on hold (logging) Locals don't want to go through planning exercise if logging or development is to continue. (Kelowna)*

- *Eliminate denial of subdivision request in areas of boil water advisory. It is unfair to prejudice those who would subdivide and have been thwarted in their attempts to have their water communities conform to the law. (Kaslo)*

OTHER SUGGESTIONS

Additional suggestions included a consistent, yet site specific provincial planning process; addressing resources; addressing cost-recovery for purveyors; developing a software program to help determine true water costs; making water systems public, not private; developing a watershed information system (GIS); scaling the level of planning to the size of the system; and ensuring that the appropriate stakeholders are involved.

Of those respondents who indicated a level of comfort with the proposals, more indicated a degree of discomfort than comfort. Areas of support included increasing local control, sharing control between the provincial and local governments, sharing information with the public and having standards. The main concerns with the proposals included uncertainty about leadership and authority, downloading of responsibilities, lack of resources, liability issues and jurisdictional uncertainties. The establishment of a lead agency and clarification of roles and responsibilities were the most frequent suggestions. Other suggestions addressed clarifying terms, enhancing legislation and enforcement, addressing liability issues, establishing open and transparent communication practices and enhancing water testing.

PROPOSAL SUPPORT – ELEMENTS SUPPORTED AND REASONS FOR SUPPORT

Of those who indicated support for the proposals the main reasons included increasing local control, as well as sharing control with both the provincial government and the public.

INCREASING LOCAL CONTROL, RESPONSIBILITY AND ACCOUNTABILITY

Support for more local control was received, along with local responsibility and accountability.

- *We support in principle the suggestion that local communities, including dispersed rural communities, be given greater influence over land use decisions in their water supply watersheds. We would interpret 'greater influence' to extend to decision making authority which is now vested in the province. (Silverton)*

SHARING CONTROL BETWEEN THE PROVINCIAL AND LOCAL GOVERNMENTS

Sharing responsibility for land use control between local and provincial governments was supported.

- *With strong provincial mandatory standards as backdrop, more delegation is OK. (Vancouver)*

INFORMATION SHARING AND PUBLIC INVOLVEMENT

Making information available to the public and involving them in decision making processes was a welcomed proposal.

- *Strongly support local input to source protection. (Nanaimo)*

- *Public and community review of all aspects of drinking water protection is critical. (Williams Lake)*

CONCERNS ABOUT THE PROPOSALS:

The main concerns with the proposals pertaining to local influence and authority were uncertainty over ultimate authority, downloading authority to local governments, lack of funding and expertise at the local levels, and problems with overlapping local jurisdictions. These concerns are described below.

UNCERTAINTY ABOUT LEADERSHIP AND AUTHORITY

Concern over the ultimate authority over drinking water systems and sources was common. Some felt a single lead agency was needed as there are currently too many departments and agencies involved to effectively implement authority.

- *The Auditor General's report on protection of drinking water, time and again referred to the multiplicity of bureaucracies without any single lead agency, as the key management problem. Why has this not already been corrected when the very lives of BC's residents are on the line? (Parksville)*

- *One should not have to go to half a dozen ministries to get a problem dealt with. A resident could easily have to deal with the CVRD, the Ministry of Health, the Ministry of Environment, the Ministry of Forests and the Highways Ministry, and finding a person who is responsible for dealing with problem can be difficult. (Ladysmith)*

PROBLEMS WITH DELEGATION

There were concerns that local governments will not be able to effectively regulate land use practices alone due to lack of expertise, resources and political influence.

- *This downloading of responsibility may be acceptable, but only if it is accompanied by appropriate enabling resources and decision making authority over activities in the watershed supply area. (Silverton)*

- *Local political ties with "industry" would make local control problematic. (Delta)*

LACK OF RESOURCES

The inability of some communities and smaller water systems to hire qualified, knowledgeable people to implement source protection was another concern.

- *Communities and municipalities do NOT have the skills, expertise and financial backing to handle water quality decision making, which absolutely must have the very best knowledge and funding on a national basis. (Salmon Arm)*

- *Without more money for inspection and enforcement, more delegation will make protection worse. (Vancouver)*

JURISDICTIONAL OVERLAP

Another concern with increasing local control was that water systems sharing the same watershed would have overlapping jurisdiction.

- *Rural areas are more likely to include overlapping jurisdictions. Not only are watersheds frequently outside the boundaries of the geographic area served by a purveyor, they may also be in a different jurisdiction or under a form of land tenure over which the purveyor has no control. (Port Alberni)*

SUGGESTIONS

The most frequent suggestions, highlighted below, concerned the need for a lead agency and clarification of roles and responsibilities – for leadership, authority, responsibility and accountability – among all jurisdictions.

ESTABLISH A LEAD AGENCY

There was a clear consensus that a single body or individual must be in charge of leading drinking protection. Suggestions included a government department, agency or official or a separate water authority or committee.

- *Supreme authority should be in the hands of an officer of the Ministry of Health. (Vancouver)*

- *There needs to be a provincial Water Authority that has the power to set regulations, enforce compliance and be accountable to the citizens. This includes the expectation that adequate competent staff will be hired to fulfil this mandate. (Abbotsford)*

- *Residents should have a single point of contact to deal with water problems. Whether you have one ministry or simply ensure someone is responsible for seeing all the other agencies pull their share of the load doesn't matter nearly as much as ensuring the citizen does not have to go to any number of agencies to get the problem dealt with. (Ladysmith)*

CLARIFY LOCAL ROLES AND RESPONSIBILITIES

There were a number of suggestions to clearly define the roles and responsibilities of the local authorities, whether they include the local Heath Department, Municipal governments or Improvement Districts.

- *Dissolve all Improvement Districts, transfer ownership and responsibility to Regional Districts and Municipalities. (Delta)*

- *The local authority need not be a new agency – it could be the local board of health (Health Act) or a group of local boards acting together. Obtaining tenure for watersheds with private land will be difficult–but control over watershed is important. (Nanaimo)*

- *Please don't give responsibility or control to Regional Districts – local governments don't want to hand over control of their water systems to RD's. (Duncan/ Chemainus/Crofton)*

CLARIFY REGIONAL ROLES AND RESPONSIBILITIES

Further suggestions dealt with clearly defined roles and responsibilities of the regional authorities, including Regional Districts and Regional Heath Departments.

- *Regional health officers must be independent of both the provincial government and municipalities, adequately funded, operate as not-for profit crown agencies responsible for ensuring that public health is never at risk as a result of unsafe drinking water. (Castlegar)*

- *Authority to implement changes should remain at regional and provincial level because they have the broader picture in mind and should ensure that one communities use doesn't impact on another area. (Nelson)*

CLARIFY PROVINCIAL ROLES AND RESPONSIBILITIES

Some suggested that the provincial government retain overall responsibility for drinking water supervision and protection by developing a province-wide protection Plan.

- *The provincial government should not totally abdicate its responsibility for protecting drinking water: we believe new legislation will be required to create or even allow adequate water protection across the province. Only the provincial government has the ability to create a new Water Act. (Silverton)*

- *Water sources do not recognize municipal boundaries and therefore an overall provincial Plan is important. (Chilliwack)*

PROVIDE FUNDING

Additional provincial or federal funding for training, enforcement and upgrading was suggested to make this proposal feasible.

- *There should be support for purveyors to meet laws requirements without becoming bankrupt e.g. cost of monthly water testing for a large public system could be easily absorbed whereas for a very small system it could become a major expense, likewise for chlorination or ozonation. (Gabriola)*

- *This is the area of greatest need–$$$$, so many water systems need up-grades and that requires money – often beyond financial capability of water district. (Spallumcheen)*

- *Increase federal funding for the construction and renewal of water treatment and delivery infrastructures, making the funding contingent on meeting water protection requirements. (Whaletown)*

IMPROVE ENFORCEMENT

Suggestions were made to improve the enforcement of drinking water sources and system compliance by granting greater authority to local law enforcement officials, officials from the ministries of Environment, Lands and Parks, Health, or a new lead agency.

- *I would like to see legislation in place that would allow law enforcement officials to punish harshly, any individual or group of individuals encroaching on a watershed i.e. trespassers, logging companies, etc. and be rigid in applying the punishment (Riondel)*

- *Protection orders should be enforceable regardless of land ownership. (Chilliwack)*

- *An improved enforcement process is required, with ticketing available as an option for certain sections of the Safe Drinking Water Regulation such as failing to notify of a health hazard and failing to have an emergency plan. (unknown location)*

CONSIDER LIABILITY

Increasing the liability of water purveyors to ensure safe drinking water was suggested.

- *That private operators of public water systems [should] be required to carry insurance to ensure that in the case of a declared health hazard or similar emergency there are funds available to compensate the public for illness, injury, damages, loss of revenue, etc. (Maple Ridge)*

INCLUDE OPEN COMMUNICATION AND DISPUTE RESOLUTION

Making water monitoring and testing results available to the public and promoting open communication and public education was suggested, as was the need for an independent dispute resolution mechanism.

- *Purveyors of water should be required to make all sample results available to their customers. (unknown location)*

- *Education for general public is needed to improve the publics' knowledge and appreciation of the hazards and solutions – perhaps through permits and licensing. (Cariboo)*

- *An independent dispute resolution process must be established to resolve disputes between licensed drinking water users and any entity, authority of Ministry proposing to build or develop a highway, mine, timber cut block, ... (Gun Lake)*

DEFINE TERMS

Suggestions to clearly define terms such as "community," "Water Users' Community," "Watershed Community," and "Aquifer Community" were made.

- *Must define 'a community' – there must be a minimum number of users. Differentiate between large (e.g. Community watershed systems) and small (single or 2-3 users systems) and have different levels in between based on size. (Cranbrook)*

4A. GENERAL DRINKING WATER MEASURES – WATER SOURCES

More than half of the participants were comfortable with standards or guidelines for water sources. The elements they most strongly supported were setting province-wide guidelines for pollutants and land use activities, province-wide standards for monitoring methods, and site-specific standards for pollutants, land-use activities, and monitoring programs to protect water sources; using these standards to conduct source assessments, and requiring training and certification of well-drillers. Concerns regarding the proposal related to details of how the standards would be developed and implemented, and how standards may or may not assist with the underlying goal of protecting watersheds. There was also a request for more detailed information and more time to consider these complex and important proposals. There were extensive comments regarding suggestions on how to improve or implement the Plan and these overlapped closely to the elements of the Plan that were most strongly supported so they are presented together below. The most frequent suggestions addressed watershed protection, monitoring methods and groundwater. There were also a few comments about the process of developing standards.

CONCERNS ABOUT THE PROPOSALS

There were a few concerns about the development of standards and the ability of small communities or individuals to respond in cases where standards are not met. Others were concerned about whether the proposed standards would assist in protecting watersheds. In particular, they did not support "multiple use" in drinking watersheds. There were also concerns among resource industries about implications to their businesses.

Those who had concerns about standards focused on the time and "red tape" required to establish standards, the need to update and adapt the utilized Canadian Drinking Water Standards if they are going to be used, the use of prescriptive standards ("One size does not fit all"), and the ability to respond if standards are not met,

- *The Canadian Potability Standards have not been updated in years–how and who is proposed to examine this and how would these be adapted/modified for all conditions. (Abbotsford)*

- *Concerned about time and 'red tape' to establish standards–again we basically know what they should be. (Osoyoos)*

Some had concerns with the acceptance of "multiple use" in the Plan and were not confident that the Plan would protect watersheds. They had concerns that even with standards in place for land use activities; forest and agriculture interests would prevail over drinking water interests.

- *This Plan assumes that current "multiple use" activities will continue –these must end– – with primary concern to protect the biodiversity of the watershed ecosystems? (Qualicum Beach)*

Resource industries were concerned about the financial and social implications of standards for land use activities in watersheds.

- *This will only pose a risk to public recreation access on private lands and the thousands of jobs on our private forest lands, in addition to forcing a costly and unnecessary administrative burden on managed forest landowners and local governments. (Victoria)*

SUPPORT FOR PROPOSAL AND SUGGESTIONS

The most frequent suggestions addressed watershed protection, legislation, monitoring methods and groundwater wells. There were also a number of comments about the process of developing standards, including use of national standards. There was debate about the need for province-wide provincial standards versus site-specific standards. Quite a few respondents also offered suggestions about testing methodology.

PROTECTION AND LAND USE PLANNING

Participants strongly supported the inclusion of standards for land-use activities in watersheds and suggested stronger actions to protect water supplies from the impacts of logging and intensive agriculture. There was also support for including private land.

- *Prevent logging practices on watersheds directly connected with drinking water. Only rehabilitation, maintenance etc. should be permitted. Keep in mind human health is just as important as fish. (Kaslo)*

- *I don't believe intensive [cattle] feedlots should be permitted on small acreages ...or allowed to operate within 1 mile of an residential subdivisions dependent on well water. (Keremeos)*

- *There must also be legislation passed which addresses the issue of land use activities on private lands, and in this sense, we must all cooperate to protect our drinking water. (Vancouver)*

ESTABLISH WATERSHED RESERVES

There was a request for the establishment of watershed reserves, reinstatement of the *Land Lease Act* and other ways to restrict access to drinking watersheds. Specific activities of concern in watersheds include logging, application of fertilizers, intensive agriculture (e.g. feedlots), roads and pipelines, and dumping of biosolids.

- *We urge the BC government to protect the source of drinking water by legislating "Watershed Reserves". Watershed Reserves would protect the source of water and be in areas that have no logging, road-building, mining or grazing by specific legislative enactment prohibiting these uses in any forms. Watershed Reserves would reduce the provincial AAC (Allowable Annual Cut) by approximately 2%. (Gibsons)*

ADDRESS WATER SOURCE PROTECTION BEFORE DEVELOPMENT

Some suggested that source water protection measures be undertaken before development occurs, e.g. through a water-source approval process that takes place before building permits or approval of subdivisions.

- *Legislation should be changed to ensure that subdivision development only occurs with an approved community water system. (Abbotsford)*

ENSURE ADEQUATE ENFORCEMENT

Some made suggestions on how to strengthen enforcement, such as the use of permits, clear standards that make enforcement possible (and no wishy-washy wording like may, can, should) and use of hefty fines.

- *In the event of degradation of drinking water quality below the safe standard set, those responsible should be required, under the legislation, to pay for damages caused. (Smithers)*

PROVIDE FUNDING FOR MONITORING, ENFORCEMENT, TRAINING AND RESEARCH

Many participants pointed to the need for funding such things as monitoring, training, ongoing research, and additional staff.

- *Appropriate funding and manpower is the only way this will ever succeed. Anything involving 'self policing' or 'voluntary reporting' is useless. (Salmon Arm)*

TRAINING AND CERTIFICATION FOR WELL DRILLERS

There was support for the training and certification of well drillers and installers.

- *We agree with certification of well-drillers and installers and also agree with registration and monitoring of wells. (Kelowna)*

DEVELOP WATER STANDARDS

Participants identified a number of issues relating to standards, including the need to set tap water standards for all pollutants, not just biological ones, including herbicides, pesticides, air borne pollutants, agricultural and industrial wastes and pharmaceuticals. Others suggested the adoption of standards used elsewhere, e.g., Canadian Drinking Water Guidelines or the US National Primary Drinking Water Regulations. It was emphasized that there should be standards rather than discretionary guidelines.

- *Standards for our drinking water must at least equal those in force in the USA and Europe. Parameters tested in drinking water quality control must include radionucleides, pesticides, industrial organic waste (e.g. dry cleaning waste, gasoline, oils, pharmaceuticals, etc, etc). (Salmon Arm)*

DEVELOP PROVINCE-WIDE STANDARDS

Some suggested that province-wide standards for tap water, source water and water system infrastructure were necessary to ensure consistency and pointed out that funding would be required for small purveyors and communities to meet these standards.

- *Agree with universal standards to be adhered to, but not add to the cost of the individual purveyors, especially in very small systems. (Gabriola)*

CONSIDER SITE-SPECIFIC NEEDS FOR STANDARDS

Others thought that some flexibility was appropriate and suggested that standards consider site-specific characteristics such as the natural water characteristics, risks to the water source and size of the system. Some suggested that medical health officers could help in setting site-specific standards.

- *Water quality parameters should be flexible to allow for site-specific characteristics but must be legal and enforceable. (Terrace)*

STANDARDS FOR WELLS

A number of standards to protect wells were supported and suggested, particularly those related to protecting existing wells from new wells, water-testing (as long as simple and inexpensive testing is available for homeowners), closing unused wells, improving well construction, and an inventory or registration of wells.

- *Before any new well is drilled or increased in capacity, a complete survey must be done of all existing users of wells as to quality and quantity. (Ladysmith)*

- *Standards for well construction and water quality could also be implemented and enforced at the building permitting stage of development. (Kootenay Bay)*

Other suggestions included making accredited lab testing laboratories more accessible in all areas of the province, developing a plan to purchase land in drinking water watersheds from private owners in order to ensure long-term water source protection, and that source watershed conditions and their specific risks to water quality be considered in setting tap water quality standards.

4B. GENERAL DRINKING WATER MEASURES – WATER SYSTEMS

More than half of participants supported the proposed standards for water systems. The items receiving the most support were standards, training and certification for system operators, and monitoring. The concerns related primarily to funding for the new Plan, current lack of adequate standards and monitoring, and the implications of the Plan on small system operators (e.g. certification). The bulk of the comments received about this aspect of the Plan were suggestions about how to make it better. The suggestions overlapped with the aspects of the Plan that people supported, so they have been combined under one main heading below. The most common suggestions were regarding the standards themselves: how to develop them, whether to make them site-specific or consistency province-wide, and apply them to a broad range of people, systems and activities. Other common suggestions related to the use of chlorine and chloramine, training and certification requirements, monitoring, funding and definitions.

CONCERNS ABOUT THE PROPOSAL

Concerns centered on the costs associated with meeting the standards, current guidelines and monitoring and the implications of certification on small purveyors.

There were concerns about the financial implications of meeting standards, particularly for small communities and systems. Some thought this might lead people to circumvent the standards.

- *To fix most water quality problems requires capital investment, whether it is a failed distribution system, inadequate treatment or poor water quality. Capital works are required to improve water quality. Where will the financial resources come from? (Lantzville)*

There were concerns about some of the current practices for monitoring including the procedure before lifting boil-water advisories *(We like the 2 sets of testing for chlorine residuals and coliforms resulting in close to 80 hours from time of resumption of chlorination)*, the present standards for Cryptospridium and Giardia and the lack of tests to determine the actual presence of organisms know to cause disease in humans.

There were questions and concerns about the need for certification of those involved with small systems including, they should not be onerous, will all employees require certification? and will volunteers need certification?

Some were concerned about the potential for privatization of water treatment systems.

- *Private "for profit" water projects that would provide public drinking water and shortsighted cost cutting initiatives to privatize or reduce water inspection, must be outlawed in the water protection legislation. (Vancouver)*

Some other concerns included the need to address climate change and the likelihood of water quantity shortages in the future, the liability of small purveyors, responsibilities for systems that have no operators, and implications for exploration camps.

SUPPORT FOR PROPOSAL AND SUGGESTIONS

The areas of the proposal most strongly supported and for which there were detailed suggestions are summarized below. The most common suggestions were related to the development of standards and the debate between the need for province-wide or site-specific standards. Other suggestions addressed the range of activities to be covered by standards, water treatment, training and certification, monitoring and the need for funding.

STANDARDS – HOW TO DEVELOP THEM

There were many suggestions on how to develop the standards, including apply a precautionary principle, make sure they are realistic and science-based, make sure they are health-based, use the Canadian Drinking Water Guidelines as a base, include standards for all pollutants, not just biological. Some specific parameters identified were turbidity, nitrates, THMs, herbicides, pesticides and air borne pollutants, agricultural and industrial wastes, pathogens and pharmaceuticals.

- *Ensure standards are based best science–do not create unrealistic standards. The standard should be safe drinking water–nothing more. (Cranbrook)*

STANDARDS – MAKE SITE-OR SITUATION-SPECIFIC

Some participants spoke about the need for flexibility to allow for site-specific variations. Suggestions included separate standards for unregulated systems, modules developed for classes of operators, standards for small or individual systems and site-specific evaluations.

- *All communities are not equal. One plan may not work in all communities. Standards in Vancouver may not work in Cranbrook. (Cranbrook)*

- *Many varied size of water distributors. Many systems very very simple. Evaluate each system. (Cobble Hill)*

STANDARDS – ENSURE CONSISTENCY PROVINCE-WIDE

There were others who thought site-specific standards were not appropriate and that province-wide standards were needed to ensure consistency. It was suggested that the standards be precise so developers and communities know that the parameters and consequences are the same for all communities. Some were concerned about local influences undermining the need for drinking water protection.

- *Ensure appropriate province-wide standards are set—and apply to all, minimums must be met (don't let specific site standards miss the minimums). (Crofton)*

- *Get away from "site specific" standards if it means giving exemptions from certain standards in some areas. (Ladysmith)*

- *Site specific is not acceptable due to local influence. (Malahat)*

STANDARDS – APPLY TO RANGE OF PEOPLE, SYSTEMS AND ACTIVITIES

There was support and suggestions for a wide range of situations including water licenses, staff involved in treatment and testing, septic systems, system construction, pipeline contractors and others constructing systems, water filters used by homeowners, security, and products used in water systems and well drilling (e.g. lubricants).

- *Insist on a Province wide standard for infrastructure, delivery and maintenance for all water licenses. (Fruitvale)*

- *Need standards for products used in water systems and well drilling (e.g., lubricants). (Prince George)*

TREATMENT – VIEWS ON CHLORINE AND CHLORAMINE

Some participants were particularly concerned about the use of chlorine, and also about use of chloramine and fluoride in water treatment. Some suggested the alternatives be explored and approved and other non-toxic methods. There were related concerns about turbidity.

- *Ensure that local water authorities switch from reliance on disinfection by chlorine or chloramine, to a site-specific combination of effective, non-toxic means such as biological filtration, ozonation, activated charcoal filtration, ultraviolet irradiation. (Nanaimo)*

- *We strongly object to the use of chloramine in our local water system, and believe that funds should be made available to upgrade municipal water supplies to sand filtration, ozonation, and judicious use of chlorine – not chloramine. (Abbotsford)*

INCLUDE TRAINING AND CERTIFICATION REQUIREMENTS

There was strong support for and many suggestions regarding training and certification, including developing training programs specific to system types, making training readily available and accessible throughout the province, providing funding for training and increasing monitoring of systems where training is not up to date. There were suggestions to develop training and certification for small purveyors, treatment plant and distribution system operators, all drillers (not just well drillers) and those who install and maintain well pumps.

- *There should be a legally enforceable requirement for training and certification for water treatment plant and distribution systems operators. We have learned that "grand fathering" just does not work. (Kelowna)*

- *The certification has to be legitimate. Do not certify operators just because they show up. (Shawnigan Lake)*

INCLUDE MONITORING

There were suggestions about how to conduct monitoring such as having independent audits, having regular (daily) testing for residuals, using site-specific standards for monitoring, using strict protocols for testing and following up results with remedial action if required. There were also requests for government-sponsored water testing programs for homeowners.

- *Have independent overseers. (Parsons)*

- *Monitoring should not be done by water purveyors–govt. or an independent agency should do them (e.g., submission of false results). (Williams Lake)*

- *Strict adherence to scientific methods should be the norm over politics and emotions/e.g. proper testing and procedures. (Kimberly)*

PROVIDE FUNDING

There were many suggestions that funding will be required to support this part of the Plan. People requested resources to assist with testing, system upgrades, additional staff, monitoring, studies and identification of options.

- *Should the government provincially set standards they MUST be willing and able to help those communities, like Telkwa, which do not have the dollar resources to meet standards in water treatment or delivery. (Telkwa)*

- *Water systems should be prioritized on a risk basis and infrastructure funding made available over a period of several years so that all systems can eventually be addressed and upgraded as necessary. (Abbotsford)*

PROVIDE DEFINITIONS

Participants asked for definitions of "safe" and "potable" drinking water, who a water purveyor is – who is responsible for meeting the standards, and of a community water system.

- *We need a definition of a community water system that is meaningful, and that allows us to regulate restaurants, motels and other public places that are on individual, private water supplies. (Abbotsford)*

4C. GENERAL DRINKING WATER MEASURES – RESEARCH AND EDUCATION

Of all aspects of the Plan, this was the one most strongly supported by participants. There was support for public education, for school children and adults, on a wide range of water use and quality topics. There was support for research in a variety of areas such as water treatment, impacts of land uses and wildlife on water quality, and aquifers. There were limited concerns regarding the proposal; these included cautions about research and the need for research and the costs associated with the program. The suggestions were abundant and focused on specific information needed to educate the public, ways of providing education and sources of good information. There were recommendations about the types of research required, approaches to research, use of existing information and programs, training programs, and the broad range of people who should receive education and training. Another suggestion was to support monitoring programs. The sections on areas supported and on suggestions have been combined because they overlapped.

CONCERNS ABOUT THE PROPOSAL

Only a few specific concerns were expressed about this proposal. Some thought that caution should be taken when approaching research and others doubted whether it was even required. Some wondered how this would be funded, the high costs involved and potential implications of the results.

A few participants expressed concern about the opportunity for bias and for the results of research to be influenced by third parties.

- *Science can be bought to argue for any perspective (Victoria)*

There were a few concerns about how much this program would cost to introduce and also about how the results of research may have cost implications.

- *Concern that the high cost of monitoring and research on land-use practices will lead to setting arbitrary standards for land-use practices that will negatively affect resource industries. (Prince George)*

There were a few participants who thought that there was enough research and that the government should simply get on with the Plan.

- *Has been researched to death! (Kelowna)*

SUPPORT FOR PROPOSAL AND SUGGESTIONS

There was a great deal of support for "all aspects" of the proposal and specific types of information required in public education and research programs. Support was also given to the idea of reporting results of monitoring to the public and to using a community-based approach to public education.

The most common suggestions were regarding the type and form of information required for public education and for additional research. There were also ideas about who should provide information and approaches to research and training that might work best. Some suggested that existing information sources and programs be made use of and that adequate funding be provided in a cost-effective way. It was suggested that education, training and information be provided to a very broad range of people. Support for monitoring programs was requested.

PUBLIC EDUCATION – INFORMATION NEEDS

A number of topics were suggested for public education programs including, the need for disinfection and options for treatment systems, causes and prevention for water contamination and depletion, the need for increased revenue, why treating drinking water is necessary and the health impacts associated with chlorine. Many suggestions focused on water conservation and quantity noting the relationship between quantity and quality.

Some suggestions focussed on the source of information to be used in education program including, the Ministries of Environment, and Health and also non-government people.

There were suggestions that education take place on television, through schools, and signposts on roads identifying water source areas.

PUBLIC NOTIFICATION

In addition to general information about drinking water, there were specific requests for the public to be notified periodically about the quality of their water. There was also a call for notification about changes in treatment (i.e., introduction of chemicals such as chlorine) especially to safeguard those allergic to chemicals and for protocols in the case of emergencies such as the recent suspected contamination of the water supply in Langley.

- *The save drinking water legislation called for should include a "right-to-know" requirement that BC citizens be kept informed about the quality of their drinking water, comparable to the requirement under US law the US water system customers be informed annually about the state of their drinking water. (Smithers)*

TYPES OF RESEARCH REQUIRED

Some participants were very specific about the types of research they thought should be undertaken. Suggestions included aquifer mapping, land use practices and the impacts on water quality and treatment, levels of contaminants and their sources, the relationship between aquifers and watersheds, effects of chlorine on humans, effects of wildlife on water quality, and the relative risks of using untreated water vs. chlorine byproducts.

APPROACH

In terms of an approach to providing information to the public, there were suggestions to emphasize factual information, acknowledge research that does not support status quo, involve community groups, rely on independent experts not talkers, and include recommendations to protect drinking water.

- *Need balanced approach, involve all interests. (Nanaimo)*

USE EXISTING INFORMATION AND PROGRAMS

A number of participants suggested that education and research build on existing programs and sources of information. There were suggestions to support community colleges and universities to carry out research. There was specific mention of building on the environmental pledge program.

- *Continued support for existing research programs; expansion of regional research facilities and programs. (Kimberley)*

- *Utilize existing information and professional associations available across North America. (Vancouver)*

- *Past work by groups such as the American Waterworks Association Research Foundation has substantially deepened the understanding of the source water-treatment relationship. (Kamloops)*

PROVIDE ADEQUATE FUNDS IN A COST-EFFECTIVE WAY

There was a request for funding to support graduate research and public education and suggestions that this must be done in a cost-effective way.

- *Coordinate funding for graduate research with LOCAL academic institutions. This can have powerful and positive repercussions! (Spallumcheen/Armstrong)*

- *Set limits on fund and to become self funded after 10-15 years. (District of Kitimat)*

SUPPORT MONITORING PROGRAMS

There were requests for the return of water testing programs for homeowners and for greater access to water testing facilities. Some also suggested faster turn-around times so problems can be identified before they cause problems.

- *Bring back water testing program for homeowners. (Williams Lake)*

- *Testing turn around has to be speedier otherwise public notice of problem may lag event and cause concern. (Lillooet)*

EDUCATE A BROAD RANGE OF PEOPLE

There were a number of suggestions about who should be on the receiving end of the education programs. The most common suggestions were decision-makers, developers, local officials, and elementary, high school and university students. There were also suggestions that the programs be community-based and focused on relevant subjects.

- *Educate developers, Regional Districts, Communities, and general population about this legislation. Requires a financial commitment from Province. (Shuswap)*

- *Allow community approach to identify important features that are particular to each area. (Sorrento)*

LOCATION-SPECIFIC DRINKING WATER ISSUES

In each community where information sessions were held, participants raised specific drinking water issues that were important in their communities. This input came in addition to the comments provided specifically on the Plan and was often addressed in one-on-one discussions with regional staff of various ministries. The summary below identifies some of these issues here as they did not always fit into the four topic areas of the Plan that are reported on in earlier sections of this report. When participants raised local issues, they were asked to consider whether or not the proposed Drinking Water Protection Plan would help to address their concerns.

NANAIMO

A key concern expressed in Nanaimo was logging in drinking watersheds and the control that the Ministry of Forests has over these areas. Specific concerns in the Nanaimo drinking water supply area included *"massive clearcuts in excess of Forest Practice Code allowances"* and *"application of 44 tonnes of fertilizers on the clear cuts"*. There was reference to studies finding that the fertilizers used in the Nanaimo watershed *"contain carcinogenic compounds and materials originating from American industrial waste"*.

There were comments and concerns about sources of water contamination such as racetracks, septic systems, landfills, sewage treatment plant sludge, manure and development-related pollutants. There were comments about the amount of chlorine in Nanaimo's drinking water and a preference for protecting water rather than treating illness.

The issue of failing septic systems and concerns over the quality of well water on Galiano Island was raised.

ABBOTSFORD

In Abbotsford there was a strong focus on the need to protect water sources. Concerns were expressed regarding activities that affect water quality in local watersheds and the Abbotsford-Sumas aquifer: e.g., mining, logging, recreation (*"yahoo factor"*), and stormwater injections. The biggest concern regarding threats to drinking water was the practice of manure spreading and composting.

KELOWNA

As in Nanaimo, a major concern was with the impacts of logging in drinking water supplies and the view that the Forest Practices Code does not adequately protect water. Other source protection issues were urban development impacts on small urban streams, problems with septic systems, cows in Keremeos Creek and the Similkameen River, and application of GVRD biosolids.

Participants from the community of Erikson in particular, were concerned about health impacts from the use of chlorine for water treatment and the rights of a community to influence the choice of water treatment approach. They expressed a desire to use alternative and innovative forms of treatment and protect their pristine watersheds.

There were some concerns specific to Kelowna: concern about a private water meter manufacturing company taking over and increasing water rates in the City of Kelowna, questions about who was responsible for the Cryptosporidium outbreak in Kelowna, and concerns about runoff from a human waste bio treatment facility into Okanagan Lake.

CRANBROOK

In Cranbrook some voiced their opposition to logging in watersheds and claimed that the Ministry of Forests had too much authority over drinking water. One example given was logging in the Mark Creek watershed, Kimberly's water supply, which would have resulted in the expenditure of $3-5 million by the community for a filtration plant.

There was support among some participants, including those from Erikson, for increased local control and authority to protect drinking water sources. Some saw this as a way to overcome an issue in Kimberly where there is an Integrated Resource Management Plan with community monitoring, *"but no say in land use activities in the watershed"*. Other examples where people want more input to watershed decisions were in New Denver, where citizens were arrested when they tried to prevent logging in their watershed, and Perry Ridge where people are concerned about risk not only to water quality but to property because of landslides.

SMITHERS

The "Smithers" information session was held in the nearby community of Telkwa where there is an ongoing concern over the community water supply and their inability to secure funding to improve the treatment infrastructure. Participants spoke about the health impacts of "beaver fever" on family members, turbidity that causes washing machines to plug up every couple of weeks, increased use of bottled water and intensive agriculture practices along the Bulkley River where the drinking water comes from.

Another local concern was an incident in Smithers where vandals opened up 11 fire hydrants in the middle of the night, drawing their water supply down to levels where fire-fighting would have been very difficult. This incident raised awareness of security issues and risks to water supplies.

PRINCE GEORGE

A key local concern in Prince George was the impact of pulp mill effluent on drinking water supplies. There were concerns about leaks from settling ponds, air quality issues, dumping of sludge, dumping of used oils and the colour of water. Some spoke about the practice among heavy equipment operators in the forest industry of draining used oil into the ground near water supply systems.

Another concern in the Prince George area was the lack of nearby labs to get timely water test results. There was a suggestion to create a lab at the University of Northern BC through a partnership with government, and to provide testing at no cost to individual purveyors as is done in other provinces. There was also opposition to the use of fluoride in the water treatment system.

FORT ST. JOHN

One particular concern in the Fort St. John session was the extensive reliance on water haulers in the area, including Charlie Lake. There were concerns about risks associated with this practice and suggestions that haulers be trained, certified and audited. Leaching from septic systems into groundwater and lake water supplies, e.g. Moberly Lake, was also a concern.

WILLIAMS LAKE

A specific local concern in Williams Lake was a proposed landfill near Soda Creek and the potential for contamination of the underlying aquifer. There were other concerns related to potential sources of water contaminants, including wildlife, fertilizers, chemicals and spilled oil from trucks.

Those from rural areas were particularly concerned about how the Plan will affect them and how the government will support them. There was a request for nearby, free water testing as was once provided by the Health Unit.

VANCOUVER

The main local concern expressed in Vancouver was "multiple-use of watersheds" and specifically logging in the GVRD watershed and watersheds around the province. This concern was heightened by a recent announcement by the Minister of Forests, The Honourable Gordon Wilson, regarding the establishment of forest reserves. There was reference to the high costs being spent now to rectify past logging activity in the watershed. A petition was presented to the Minister of Environment, The Honourable Ian Waddell, requesting the establishment of watershed reserves.

There were also concerns about water treatment, for example, health effects related to use of chlorine, fluoride and soda ash; and the need for filtration to reduce health risks associated with turbidity. There was reference to E. coli in Burnaby water and concern that this information was not made public. Other specific concerns were the impact of gypsy moth spraying on drinking water supplies, and the need to address potential problems related to cross-connections and backflows.

There was discussion about a planned filtration plant at the Seymour Dam water facility and concern about *"giving away our control over water"* through a contract that may be granted to a US company. Related to this were concerns regarding the North American Free Trade Agreement, privatization of water systems and the impact either one could have on local governments' ability to regulate.

KAMLOOPS

Local concerns in Kamloops related to the lack of infrastructure funding to upgrade their water treatment system and consideration of filtration and water metering in their community. Social equity issues arose in relation to the use of bottled water (i.e. that poor people cannot afford bottled water when it is necessary). It was also suggested that bottled water should be regulated and considered in the Plan.

There were concerns about sources of water pollution such as cattle in the South Thompson, dangerous goods, and boats, animals and people in the water. Another concern was about cross-connections and the potential for back-flows contaminating water supplies.

There was a suggestion to introduce a dual piping system to carry potable and non-potable water separately because such a small percentage of treated water (5%) is used for human consumption; this would reduce treatment costs.

APPENDIX A

Drinking Water Protection Plan

Information Session Agendas

Daytime Agenda (afternoon times shown)

12:45 Registration and Coffee

1:00 Introduction/Welcome

- Plan Overview
- Process Overview

1:30 Action Plan Components

- Small Group Discussion

3:45 Closing Plenary Session

4:00 Adjourn

APPENDIX B

Drinking Water Protection Plan

Information Session Agendas

Evening Agenda

7:00 Sign-in and coffee

7:10 Welcome and Opening Remarks

7:15 Discussion paper overview

7:45 Questions and then comments from floor

8:30 One-on-one discussions

9:00 Adjourn

APPENDIX C – COMMENT FORM

BRITISH COLUMBIA

DRINKING WATER PROTECTION PLAN
Comment Form

Fax Back completed forms to (604) 980-9992

Mail to: 3848 St. Georges Ave. North Vancouver, BC V7M 1W5

Or send comments by email to Britney@praxis.ca

Completed forms received by February 19, 2001 will be incorporated into the consultation summary report.

The following questions correspond directly to proposed approaches outlined in the Drinking Water Protection Plan: A Discussion Document (on-line at **http://www.env.gov.bc.ca/wat/wq/dw/_** or call 660-2421 in Greater Vancouver; 387-6121 in Victoria; or 1-800-663-7867 in the rest of the province). Please feel free to attach additional comments beyond those requested below or if you run out of space.

Your comments will help us refine the proposed Drinking Water Protection Plan that may become the basis of new laws in BC. Thank you for your time and thoughts!

A Few Questions About You:

1. Please indicated the community in which you live or the nearest town if you live in a rural area:

_____

2. Do you receive water from: (check one)
   - ☐ Your own private intake or well
   - ☐ A community system

3. Please indicate your affiliation (check one)
   - ☐ Government: indicate area of responsibility (e.g. Health; Environment)
     - ☐ Federal _____
     - ☐ First Nations _____
     - ☐ Provincial _____
     - ☐ Regional _____
     - ☐ Local _____
   - ☐ Non-Government Interests (check one interest)
     - ☐ Environment
     - ☐ Agriculture
     - ☐ Community Development
     - ☐ Forestry
     - ☐ Water Purveyors
     - ☐ Well Drillers
   - ☐ Academic/Student
   - ☐ BC Resident
   - ☐ Other (please indicate) _____

1. Assessing the water sources and systems

Please respond on a scale of 1 - 5, where 1 is "not at all comfortable" and 5 is "completely comfortable".

a) What is your overall level of comfort with the proposed approaches to assess water sources? 1 2 3 4 5 (circle one)

b) What is your overall level of comfort with the proposed approaches to assess water systems? 1 2 3 4 5 (circle one)

c) What elements of the proposed approach do you support?

Water sources:

Water systems:

d) What changes would you suggest to make the proposed approaches better?

Water sources:

Water systems:

2. Community planning

Please respond on a scale of 1 - 5, where 1 is "not at all comfortable" and 5 is "completely comfortable".

a) What is your overall level of comfort with the proposed approaches to give communities and water providers greater input into regional planning and other activities in areas which could impact their water sources? 1 2 3 4 5 (circle one)

b) What elements of the proposed approach do you support?

c) What would you change to make these proposed approaches better?

_____

_____

_____

3. Local influence & authority

Please respond on a scale of 1 - 5, where 1 is "not at all comfortable" and 5 is "completely comfortable".

a) What is your overall level of comfort with the proposed approaches to give communities additional authority to implement source water protection measures themselves (outside their jurisdiction)? 1 2 3 4 5 (circle one)

b) What elements of the proposed approach do you support?

_____

_____

_____

c) What would you change to make these proposed approaches better?

_____

_____

_____

4. General drinking water measures

Please respond on a scale of 1 - 5, where 1 is "not at all comfortable" and 5 is "completely comfortable".

a) What is your overall level of comfort with the proposed approaches to introduce provincial standards to protect water sources? 1 2 3 4 5 (circle one)

b) What is your overall level of comfort with the proposed approaches to introduce provincial standards to protect water systems? 1 2 3 4 5 (circle one)

c) What is your overall level of comfort with the proposed approaches to guide and back up the suggested provincial standards with scientific research and to improve public awareness? 1 2 3 4 5 (circle one)

d) What elements of the proposed approach do you support?

Water sources: _____

_____

_____

Water systems: _____

_____

_____

Research and Education: _____

_____

_____

c) What would you change to make these proposed approaches better?

Water sources: _____

_____

_____

Water systems: _____

_____

_____

Research and Education: _____

_____

_____

Other Comments:

_____

_____

_____

_____

_____

Please fax completed comment forms to (604) 980-9992,
send by mail to 3848 St. Georges Ave. North Vancouver, BC V7M 1W5
or send comments by email to Britney@praxis.ca

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Thank You!